DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286 (FEB03) Form No. 5134370-00 Various Air Compressors Copyright © 2001 DEWALT The following are trademarks for one or more DEWALT power tools: the yellow and black color scheme; the “D” shaped air intake grill; the array of pyramids on the handgrip; the kit box configuration; and the array of lozenge-shaped humps on the surface of the tool.

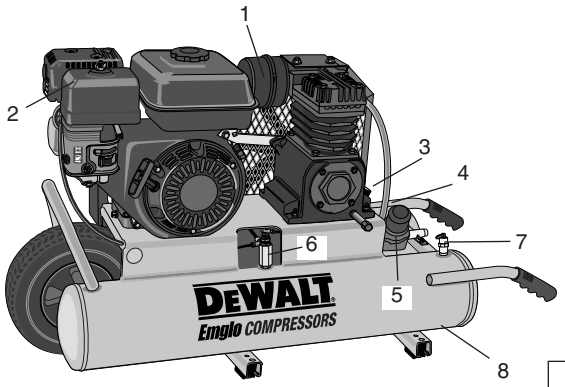
Questions? See us on the World Wide Web at www.dewalt.com

INSTRUCTION MANUAL
GUIDE D'UTILISATION
MANUAL DE INSTRUCCIONES

INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO Y PÓLIZA DE GARANTÍA. **ADVERTENCIA:** LÉASE ESTE INSTRUCTIVO ANTES DE USAR EL PRODUCTO.

DEWALT®

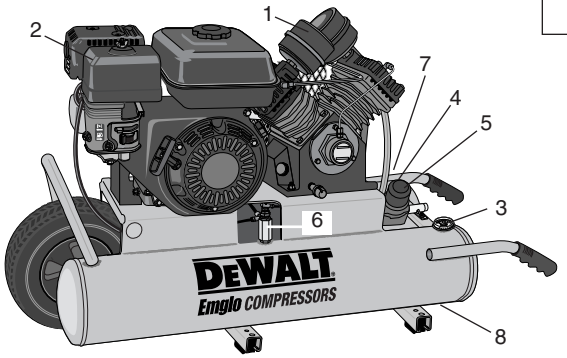
D55270, D55270T, D55271, D55271T, D55275, D55276
Contractor's Gas Wheeled Portable Air Compressor
Compresseurs d'air portatif à moteur à essence sur roues de classe entrepreneur
Compresor de aire portátil a gasolina con ruedas para contratistas



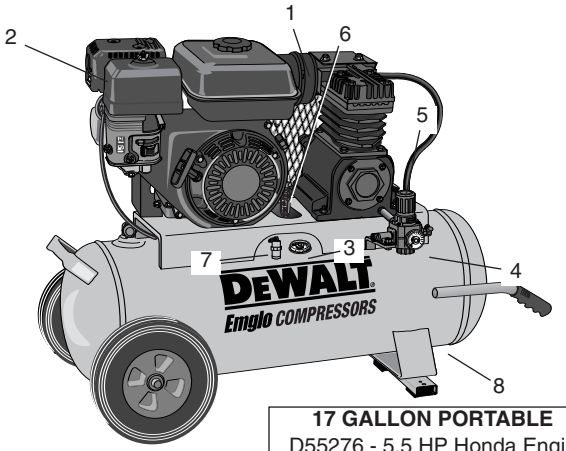
8 GALLON PORTABLE
D55270, D55270T* - 5.5 HP Honda Engine

*Denotes 2-wheeled version.

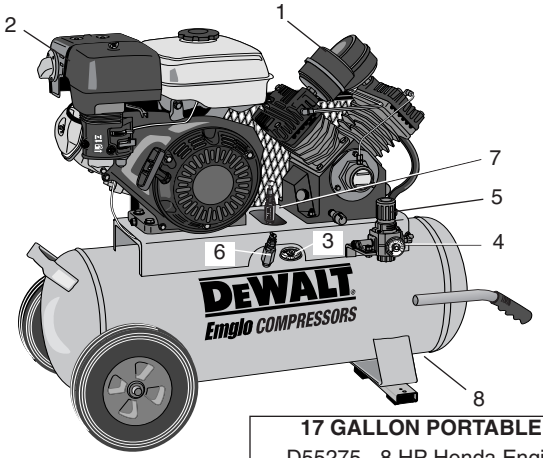
8 GALLON PORTABLE
D55271, D55271T* - 8 HP Honda Engine



1. Pump Air Filter
2. Engine Air Filter
3. Tank Pressure Gauge
4. Regulated Pressure Gauge
5. Pressure Regulator
6. Pilot valve
7. Safety Valve
8. Tank Drain(s)



17 GALLON PORTABLE
D55276 - 5.5 HP Honda Engine



17 GALLON PORTABLE
D55275 - 8 HP Honda Engine

SPECIFICATIONS

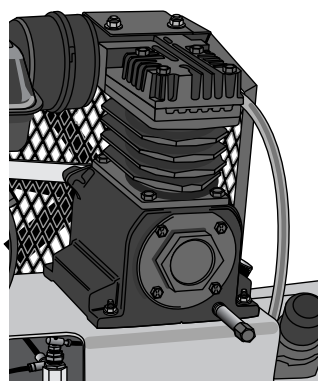
MODEL	WEIGHT	HEIGHT	WIDTH	LENGTH	Typical values @ 100 psi CFM
D55270	160 lbs. (72.57 Kg.)	25 in. (635 mm.)	18.25 in. (463.55 mm.)	43 in. (1092.2 mm.)	8.9
D55271	213 lbs. (96.62 Kg.)	27.75 in. (704.85 mm.)	18.25 in. (463.55 mm.)	43 in. (1092.2 mm.)	16.2
D55275	238 lbs. (107.96 Kg.)	33.75 in. (857.25 mm.)	20.25 in. (514.35 mm.)	43 in. (1092.2 mm.)	16.2
D55276	185 lbs. (83.91 Kg.)	31 in. (787.4 mm.)	20.25 in. (514.35 mm.)	43 in. (1092.2 mm.)	8.9

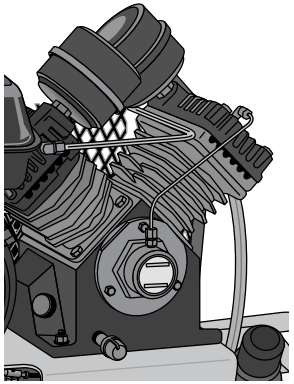
English

Engine Specifications

5.5 Hp Honda GX-160
Internal Combustion
4-stroke
3450 RPM

8 Hp Honda GX-240
Internal Combustion
4-stroke
3450 RPM





K Pump Specifications

Inline, vertical twin cylinder
Single Stage
Oil Lubricated
Cast Iron crankcase, cylinder, and head
Bore: 2-1/2“ (63.5 mm)
Stroke: 2” (50.8 mm)
Weight: 47 lbs. (21.32 kg.)
Oil Capacity: 14 oz.

G Pump Specifications

V - twin 4 cylinder
Single Stage
Oil Lubricated
Cast Iron crankcase, cylinder, and head
Bore: 2-1/2 “ (63.5 mm)
Stroke: 2-3/8” (60.33 mm)
Weight: 69 lbs. (31.3 kg.)
Oil Capacity: 30 oz.

English

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS OR ANY DEWALT TOOL, CALL US TOLL FREE AT 1-800-4-DEWALT (1-800-433-9258).

⚠ ***WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE OPERATING THIS COMPRESSOR.*** *Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.*

SAVE THESE INSTRUCTIONS

⚠Safety Instructions

⚠***WARNING:*** *Some dust created by this product contains chemicals known to State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:*

- *compounds in fertilizers*
- *compounds in insecticides, herbicides and pesticides*
- *arsenic and chromium from chemically treated lumber*

To reduce your exposure to these chemicals, wear approved safety equipment such as dust masks that are specially designed to filter out microscopic particles.

⚠***WARNING:*** *Use of this product will expose you to chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.* ***Avoid inhaling vapors and dust, and wash hands after using.***

⚠ ***WARNING:*** *This product contains chemicals, including lead, known to the State of California to cause cancer, and birth defects or other reproductive harm.* ***Wash hands after handling.***

The user of the air compressor must understand these instructions. Each person operating the air compressor must be of sound mind and body and must not be under the influence of any substance, which might impair vision, dexterity, or judgement.

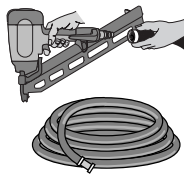
AIR TANK

The tank on your Air Compressor is designed and may be UM coded (for units with tanks greater than 6 inch diameter) according to ASME Section VIII, Div. 1 rules. All pressure vessels should be inspected once every two years. To find your state pressure vessels inspector, look under the Division of Labor and Industries in the government section of a phone book or call 1-800-4DEWALT for assistance.

The following conditions could lead to a weakening of the tank, and result in a violent tank explosion:

1. ***Failure to properly drain condensed water from the tank can causing rust and thinning of the steel tank****. Drain tank daily or after each use. If tank develops a leak, replace it immediately with a new tank or new compressor outfit.*
2. ***Modifications or attempted repairs to the compressor tank.*** *Never drill into, weld, or make any modifications to the tank or its attachments.*
3. ***Do not modify the safety valve, or any other components that control tank pressure.*** *The tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.*

ATTACHMENTS & ACCESSORIES



Exceeding the pressure rating of air tools, spray guns, air operated accessories, tires and other inflatables can cause them to explode or fly apart, and could result in serious injury. Follow the equipment manufacturers recommendation and never exceed the maximum allowable pressure rating of attachments. Never use the compressor to inflate small low-pressure objects such as children's toys, footballs, basketballs, etc.

RISK OF EXPLOSION OR FIRE

Always operate the compressor in a well-ventilated area free of combustible materials, gasoline or solvent vapors. If sparks from compressor come into contact with flammable vapors, they may ignite, causing fire or explosion. If spraying flammable materials, locate compressor at least 20 feet up wind from spray area. An additional length of hose may be required.

Store flammable materials in a secure location away from compressor.

Restricting any of the compressor ventilation openings will cause serious overheating and could cause fire. Never place objects against or on top of compressor. Operate compressor in an open area at least 3 feet away from any wall or obstruction that would restrict the flow of fresh air to the ventilation openings.

RISK FROM FLYING OBJECTS

The compressed air stream can cause soft tissue damage to exposed skin and can propel dirt, chips, loose particles and small objects at high speed, resulting in serious injury. Always wear ANSI Z28.1 approved safety glasses with side shields when using the compressor. Never direct air stream at people or animals. Use only OSHA approved air blow guns.

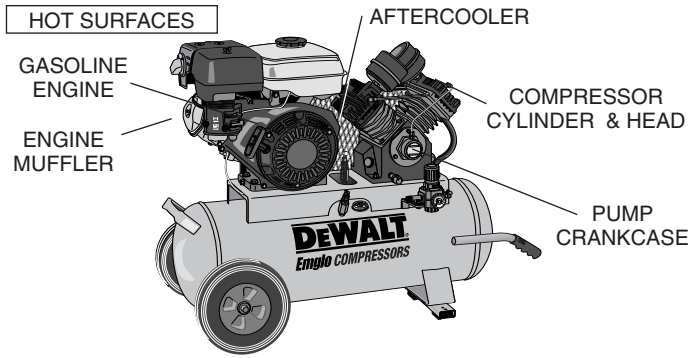
RISK TO BREATHING

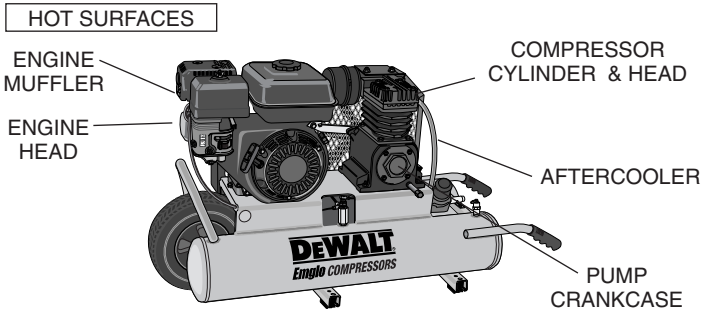
The compressed air from your compressor is not safe for breathing! The air stream may contain carbon monoxide, toxic vapors or solid particles. Never inhale air from the compressor either directly or from a breathing device connected to the compressor.

Sprayed materials such as paint, paint solvents, paint remover, insecticides, weed killers, etc. contain harmful vapors and poisons**. NOTE:** Operate air compressor only in a well ventilated area. Read and follow the safety instructions provided on the label or safety data sheets for the material you are spraying. Use a NIOSH/MSHA approved respirator designed for use with the specific application.

RISK FROM MOVING PARTS

The compressor is designed to run continuously. Always turn off the compressor, bleed pressure from the air hose and tank, and disconnect from power source before performing maintenance or attaching tools and accessories.





Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents may cover moving parts and should be avoided as well. Do not remove the protective covers from this product. Never operate compressor with guards or protective covers that are damaged or removed. Never stand on the compressor.

HOT SURFACES

Touching exposed metal such as the compressor head or aftercooler can result in serious burns. Never touch any exposed metal parts on

compressor during or immediately after operation. Compressor will remain hot for several minutes after operation. Do not move the compressor while it is running. Hot motor parts could cause burns contributing to the dropping of the compressor, damaging the compressor and/or injuring the operator.

RISK FROM NOISE

⚠***CAUTION:*** *Wear appropriate personal hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.*

ENGINE

Your air compressor is powered by a Honda® gasoline engine. Most accidents with engines can be prevented if you follow all instructions in this manual, the engine owner's manual and on the engine. Some of the most common hazards are discussed herein, along with the best way to protect yourself and others:

- Know how to stop the engine quickly, and understand the operation of all controls.
- Never permit anyone to operate the engine without proper instructions.
- Do not allow children to operate the engine.
- Keep children and pets away from the area of operation.

Refuel with care: ***ALLOW ENGINE TO COOL.*** Gasoline is extremely flammable, and gasoline vapor can explode. Refuel outdoors, in a well-ventilated area, with the engine off. Never smoke near gasoline, and keep other flames and sparks away. Always store gasoline in an approved container. If any fuel is spilled, move compressor to another location before starting the engine.

Carbon Monoxide Hazards: Exhaust gas contains poisonous carbon monoxide. Avoid inhalation of exhaust gas. Never run the engine in a closed garage or confined area.

ALWAYS STORE COMPRESSOR IN A HORIZONTAL POSITION, ON ALL FOUR RUBBER MOUNTS.

Introduction

Congratulations on the purchase of your new DEWALT Air Compressor! You can be assured that this tool has been constructed with the highest level of precision and accuracy. Each component has been rigorously tested to ensure the quality, endurance and performance of this air compressor.

By reading and following the safety, operation, maintenance and troubleshooting steps described in this manual, you will receive years of trouble free operation.

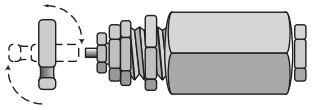
The manufacturer reserves the right to make changes in price, color, materials, equipment specifications or models at any time without notice.

Inspection of Compressor

Inspect for signs of obvious or concealed freight damage. Report any damage to the delivering freight carrier immediately. Be sure that all damaged parts are replaced and any mechanical problems are corrected prior to the operation of the air compressor. The air compressor serial number is located on the deck of the air compressor and pump bearing cap. Please write the serial number in the space provided in the service section for future reference.

Features

PILOT VALVE

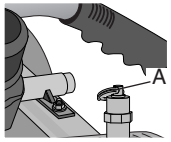


Pilot valves are used to maintain a constant pressure range while running continuously. The pilot valve may be used to operate a discharge line unloader or an unloading device in the compressor head. The DEWALT compressor unloads through the compressor head. Unloading occurs when the receivers (tanks) reach a preset cut-out pressure. The pilot valve opens, actuating the unloading device that allows the compressor to run in an unloaded mode. When the tank pressure drops to the preset cut-in pressure, the pilot valve closes allowing the unloading device to close and the compressor once again pumps into the tanks.

Manual Lock: The manual lock allows you to manually unload the compressor with air pressure in the tank. To operate the unloading device in the head, rotate the flip lever to an in-line position (dashed lines). Be sure to return lever to the loaded position after starting the engine or the pump will not operate at preset pressures.

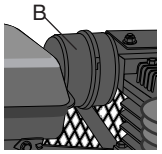
SAFETY RELIEF VALVE

This valve (A) is designed to prevent system failures by relieving pressure from the system when the compressed air reaches a predetermined level. The valve is preset by the manufacturer and must not be removed or modified in any way.



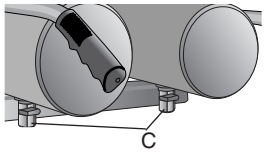
AIR INTAKE FILTER(S)

The filter(s) (B) are designed to clean air entering the pump. To ensure the pump continually receives a clean, cool, and dry air supply the filter(s) must always be clean and the filter intake must be free from obstructions.



AIR TANK DRAIN VALVE(S)

The drain valve(s) (C) are used to remove moisture from the air tank after the air compressor is shutoff.

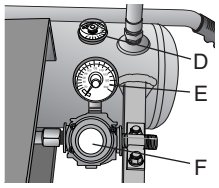


TANK PRESSURE GAUGE

The tank pressure gauge (D) indicates air pressure in the air tank.

REGULATED PRESSURE GAUGE

The regulated pressure gauge (E) indicates the air pressure available at the outlet side of the regulator. This pressure is controlled by the regulator and is always less or equal to the air tank pressure.



PRESSURE REGULATOR

The regulator knob (F) controls the air pressure coming from the air tank.

PILOT VALVE CUT-OUT PRESSURE ADJUSTMENT

NOTE: Unit can remain running while performing this adjustment

⚠ ***WARNING :*** *Aftercooler, pump head, and surrounding parts are very hot; do not touch. (see the Hot Surfaces identified on page 2)*

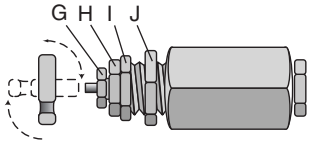
⚠ ***WARNING - Moving Parts:*** *Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewelry, or long hair can be caught in moving parts. Air vents may cover moving parts and should be avoided as well. Do not remove the protective covers from this product.*

⚠ ***WARNING :*** *The pilot valve is brass which is a soft metal. Do not overtighten screw as threads can strip out.*

1. Hold “I” firmly and loosen nut “H”.

⚠ ***WARNING :*** *Do not loosen screw “G” more than 1 revolution as screw is subjected to tank pressure and can burst out which can harm the user or surrounding personnel.*

2. Turn screw “G” clockwise to increase cut-out pressure limit or counter clockwise to decrease cut-out pressure. (example: if the cut-out pressure on the tank gauge reads 120 psi. and desired cut out is 130 psi, turn screw “G” clockwise)



3. Drain air from tanks through drain valves until pump begins to charge tanks.
4. Close drain valves.
5. Monitor cut-out pressure to verify the new setting
6. Once setting is complete hold screw “G” firmly
7. Hold “G” firmly and tighten nut “H”

PILOT VALVE PRESSURE DIFFERENTIAL ADJUSTMENT

NOTE: Unit can remain running while performing this adjustment

⚠ ***WARNING :*** *Aftercooler, pump head, and surrounding parts are very hot; do not touch. (see the Hot Surfaces identified on page 2)*

⚠ ***WARNING - Moving Parts:*** *Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewelry, or long hair can be caught in moving parts. Air vents may cover moving parts and should be avoided as well. Do not remove the protective covers from this product.*

1. Hold "I" firmly and loosen nut "J"

⚠ ***WARNING :*** *Do not loosen barrel "I" more than 1 revolution as barrel is subjected to tank pressure and can burst out which can harm the user or surrounding personnel.*

2. Turn barrel "I" clockwise to increase differential or counter clockwise to decrease differential. (for example: if pressure differential is 100 - 130 psi and 100 - 120 psi is desired, turn "I" counter clockwise)

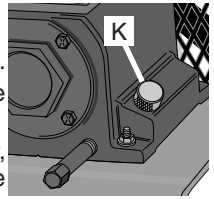
NOTE : Too narrow of a differential can cause chatter of the pilot valve. Increase differential to eliminate chatter.

3. Hold barrel "I"
4. Hold "I" firmly and tighten nut "J"

CHECKING COMPRESSOR PUMP OIL LEVEL

⚠ ***WARNING:*** *Aftercooler, pump head, and surrounding parts are very hot, do not touch. (see the Hot Surfaces identified on page 2)*

1. Ensure Unit is off.
2. Locate unit onto a flat horizontal surface.
3. Remove knurled filler knob (K) from crankcase.
4. Insert a clean screwdriver into the crankcase and remove it.
5. Look for visual signs of contaminants (water, dirt, etc.) Change pump oil if contaminants are present.
6. Oil should not exceed top raised line on side of crankcase (oil will be even with bottom of threads in crankcase fill port). If necessary fill with DEWALT synthetic oil.



CHECKING SAFETY RELIEF VALVE OPERATION

⚠ ***WARNING:*** *Aftercooler, pump head, and surrounding parts are very hot, do not touch. (see the Hot Surfaces identified on page 2)*

1. Ensure unit is off.
2. Ensure tanks are empty by looking at tank pressure gage. Drain tanks if necessary.
3. Grasp wire ring on safety valve.
4. Pull and release ring a few times to ensure plunger moves in and out.

CHECKING AIR FILTER ELEMENT

⚠ ***WARNING:*** *Aftercooler, pump head, and surrounding parts are very hot, do not touch. (see the Hot Surfaces identified on page 2)*

1. Ensure unit is off.
2. Allow unit to cool.
3. Unscrew filter top from filter base by turning counter clockwise about 5 degrees.
4. Separate filter top from base.
5. Remove element from filter base.
6. If element needs cleaning, blow out with air. Replace element if unsure.
7. Place element back in filter base.
8. Reconnect filter top to filter base and while pushing in, rotate top clockwise 5 degrees.

STARTING UNIT

Follow the pre-start and start-up procedures in the operating procedure section.

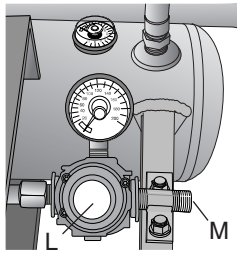
TURNING UNIT OFF

Follow the shut-down procedure in the operating procedures section.

ADJUSTING REGULATOR

1. Pull regulator knob (L) out

2. Turn knob clockwise to increase regulated pressure and counter clockwise to decrease regulated pressure.
3. When desired pressure is shown on the regulated pressure gage push knob in to lock.



INSTALLING HOSES

⚠ ***WARNING:*** *Firmly grasp hose in hand when installing or disconnecting to prevent hose whip.*

1. Ensure regulated pressure gage reads 0 PSI.
2. Grasp hose in hand at coupler location.
3. Pull back collar on female quick connect coupler (M) located on compressor.
4. Push male connector into female connector.
5. Release female connector
6. Grasp hose and pull to ensure couplers are seated
7. Adjust regulator to desired pressure.

DISCONNECTING HOSES

⚠ ***WARNING:*** *Firmly grasp hose in hand when installing or disconnecting to prevent hose whip.*

1. Ensure regulated pressure gage reads 0 PSI.
2. Grasp hose in hand at coupler location
3. Pull back collar on female quick connect coupler located on compressor.
4. Pull male connector out of female connector.
5. Release female connector

DRAINING TANKS

⚠ ***WARNING:*** *Tanks contain high pressure air. Keep face and other body parts away from outlet of drain. Use safety glasses when draining as debris can be kicked up into face. Use ear protection as air flow noise is loud when draining.*

NOTE: All compressed air systems generate condensate that accumulates in any drain point (e.g. tanks, filter, aftercoolers, dryers). This condensate contains lubricating oil and/or substances which may be regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

1. Ensure ON/OFF switch is in the OFF position.
2. Move compressor into an inclined position so drain valve(s) are at the lowest point (this will assist in removing moisture, dirt, etc. from tanks)
3. Place a suitable container under the drains to catch discharge.
4. Grasp black lever on one drain valve.
5. Slowly rotate lever so as to gradually bleed air from tank.
6. Grasp black lever on other drain valve and rotate to approximately the same position as the first. (For twin tank units)
7. When tank pressure gauge reads 10 psi, rotate valve(s) to the fully open position.
8. Close drain valve(s) when finished.

Preparation For Use

INITIAL SET-UP:

Read safety instructions before setting-up air compressor.

⚠ ***CAUTION:*** *Do not operate without lubricant or with inadequate lubricant. DEWALT is not responsible for compressor failure caused by inadequate lubrication.*

Compatibility

Air tools and accessories that are run off the compressor must be compatible with petroleum based products. If you suspect that a material is not compatible with petroleum products, an air line filter for removal of moisture and oil vapor in compressed air is required.

NOTE: Always use an air line filter to remove moisture and oil vapor when spraying paint.

Location

⚠ ***CAUTION:*** *In order to avoid damaging the air compressor, do not allow the unit to be tilted more than 10˚ when operating.*

Place air compressor at least 3 feet away from obstacles that may prevent proper ventilation. Keep unit away from areas that have dirt, vapor and volatile fumes in the atmosphere which may clog and gum up the intake filter and valves, causing inefficient operation.

HUMID AREAS

In frequently humid areas, moisture may form in the bare pump and produce sludge in the lubricant, causing running parts to wear out prematurely. Excessive moisture is especially likely to occur if the unit is located in an unheated area that is subject to large temperature changes. Two signs of excessive humidity are external condensation on the bare pump when it cools down and a “milky” appearance in compressor lubricant. You may be able to prevent moisture from forming in the bare pump by increasing ventilation or operating for longer intervals.

NOISE CONSIDERATIONS

Consult local officials for information regarding acceptable noise levels in your area. To reduce excessive noise, use vibration mounts or silencers, relocate the unit or construct total enclosures or baffle walls. Contact a DEWALT service center or call 1-800-4DEWALT for assistance.

TRANSPORTING:

⚠ ***WARNING:*** *Unit weighs more than 160 lbs. Do not move or lift without assistance.*

When transporting the compressor in a vehicle, trailer, etc. ensure that the tanks are drained and the unit is secured and placed on a flat horizontal surface. Use care when driving so to avoid tipping the unit over in the vehicle. Damage can occur to the unit or surrounding items if unit is tipped. Use a ramp if loading or unloading the unit from a height of more than 12".

MOVING:

When moving the unit into a position for use, grasp handle grips at rear of compressor, and lift compressor high enough so unit can be rolled on the front tire.

⚠ ***WARNING:*** *Ensure proper footing and use caution when rolling compressor so that unit does not tip or cause loss of balance.*

When location is reached slowly lower rear of compressor to ground.

ALWAYS STORE COMPRESSOR IN A HORIZONTAL POSITION, ON ALL FOUR RUBBER MOUNTS.

NOTE: Should the unit tip over, hard starting and smoking will occur due to oil spillage.

Air Inlet Filter

⚠ ***CAUTION:*** *Do not operate without air inlet filter*

General Requirements

The piping, fittings, receiver tank, etc. must be certified safe for at least the maximum working pressure of the unit. Use hard welded or threaded steel or copper pipes, cast iron fittings and hoses that are certified safe for the units discharge pressure and temperature. Use pipe thread sealant on all threads, and tighten joints thoroughly to prevent air leaks. **DO NOT USE PVC PLASTIC**.

CONDENSATE DISCHARGE PIPING

If installing a condensate discharge line, the piping must be at least one size larger than the connection, as short and direct as possible, secured tightly and routed to a suitable drain point. Condensate must be disposed of in accordance with local, state and federal laws and regulations.

NOTE: All compressed air systems generate condensate that accumulates in any drain point (e.g. tanks, filter, aftercoolers, dryers). This condensate contains lubricating oil and/or substances which may be regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

Operating Procedures

Pre-Start Checklist

1. Ensure the ON/OFF lever on the engine is in the OFF position.
2. Ensure tank(s) is/are drained so that moisture, dirt, etc. can be eliminated.
3. Ensure tank pressure gauge reads 0 psi.
4. Ensure safety and drain valve(s) is /are functioning properly.
5. Ensure the drain valve(s) is / are closed.
6. Check oil level in pump.
7. Check oil level in engine crankcase.
8. Visually inspect drive belt. Replace belt if frayed, cracked, or worn.
9. Ensure all guards, covers, and labels are in place, legible (for labels) and securely mounted. Do not use compressor until all items have been verified.

START-UP

1. Ensure the ON/OFF lever on the engine is in the OFF position.
2. Pull out and turn regulator knob counterclockwise until fully closed. Push in to lock. Regulated pressure gage should read 0 psi.
3. Ensure fuel is in fuel tank.
4. Turn the ON/OFF lever on the engine to the ON position.
5. Rotate the manual lock on the pilot valve into the in line position to assist with start up.
6. Follow the “Starting the Engine” procedures in the engine’s owner manual.
7. Rotate the manual lock on the pilot valve into a perpendicular position so the pump can charge the tanks.
8. Allow compressor to pump up to “cut out” pressure.

NOTE: If any unusual noise or vibration is noticed, stop the compressor and refer to the troubleshooting section.

9. Attach hose and accessory.
10. Adjust regulator to desired setting.

SHUT-DOWN

1. Follow the “Stopping the Engine” procedures in engine owner’s manual.

NOTE: If finished using compressor, follow steps 2 - 6 below.

2. Turn regulator knob counterclockwise until fully closed. Ensure regulated pressure gage reads 0 PSI.
3. Remove hose and accessory.
4. Drain the air tank(s). Ensure tank pressure gage reads 0 PSI
5. Allow the compressor to cool down.
6. Wipe air compressor clean and store in a safe, non freezing area.

Maintenance

The following procedures must be followed when maintenance or service is performed on the air compressor.

1. Turn off air compressor
2. Disconnect spark plug wire
3. Drain tank(s)
4. Allow air compressor to cool down before starting service

NOTE: All compressed air systems contain maintenance parts (e.g. lubricating oil, filters, separators) that are periodically replaced. These used parts may contain, substances that are regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

NOTE: Take note of the positions and locations of parts during disassembly to make reassembly easier.

NOTE: Any service operations not included in this section should be performed by authorized service personnel.

MAINTENANCE CHART

Procedure	Day	Week	Month	1 Year or 200 Hrs.
Check pump oil level	X			
Oil leak inspection	X			
Drain condensation in air tank(s)	X			
Check for unusual noise/vibration	X			
Check for air leaks*	X			
Inspect belt	X			
Inspect air filter		X		
Clean exterior of compressor		X		
Check safety relief valve			X	
Check belt adjustment			X	
Change pump oil **				X
Engine	*See engine owner's manual.*			

** To check for air leaks apply a solution of soapy water around joints. While compressor is pumping to pressure and after pressure cuts out, look for air bubbles to form.*

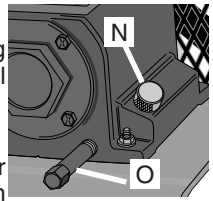
*** The pump oil must be changed after the first 20 hours or operation. Thereafter, when using DEWALT synthetic oil, change oil every 200 hours of operation or once a year, whichever comes first. In harsh environments, maintenance must be performed on a more accelerated schedule.*

COMPRESSOR PUMP OIL CHANGE

NOTE: *Pump oil contains substances that are regulated and must be disposed of in accordance with local, state and federal laws and regulations.*

⚠ ***WARNING :*** *Aftercooler, pump head, and surrounding parts are very hot; do not touch. (see the Hot Surfaces identified on page 2)*

1. Ensure unit is off.
2. Allow the unit to cool.
3. Locate a suitable container under drain plug (O).
4. Remove the knurled filler knob (N) from crankcase.
5. Remove the oil drain plug.
6. Allow ample time for all oil to drain out. (Tilting the compressor towards the drain plug will assist in draining.)
7. Install the oil drain plug.
8. Fill pump with DEWALT synthetic compressor oil. Oil should not exceed top raised line on side of crackcase. (Oil will be even with bottom of threads in crankcase fill port.)
9. Install knurled filler knob.



CHECKING BELT TENSION

⚠ ***WARNING :*** *Aftercooler, pump head, and surrounding parts are very hot; do not touch. (see the Hot Surfaces identified on page 2)*

1. Ensure unit is off and unplugged from wall.
2. Allow unit to cool down so pump can be touched.
3. ***FOR K PUMP UNITS***

   Remove six belt guard mounting fasteners (2 on the pump head and 4 on the deck)

   FOR G PUMP UNITS

   Remove seven belt guard mounting fasteners (2 on the pump head, 1 J-hook, and 4 on the deck)
4. Remove guard.
5. Place a 12" ruler perpendicular to belt and at the middle of the longest span.
6. Push up and down on the belt in the middle of the span with approximately 8 lbs. of force and notice the amount of deflection using the ruler. Belt should not move more than 1/2"; if so, see ADJUSTING BELT TENSION section.
7. Replace belt guard

ADJUSTING BELT TENSION

⚠ ***WARNING:*** *Pump and surrounding components are hot.*

1. Follow procedures 1-4 in checking belt tension section.
2. Scribe a mark at the base of the pump on the deck to be used as a reference.
3. Loosen four pump mounting bolts.
4. Remove the belt.
5. Scribe a mark approximately 1/8" from the original mark.
6. Slide the pump to the new mark and retighten the pump mounting bolts.

⚠ ***WARNING :*** *Use caution when rolling belt onto flywheel as fingers can get caught between the belt and flywheel.*

7. With the pump secure, roll the belt over the flywheel and the pulley.
8. Check the belt tension again.
9. If tension is good, retighten the engine brace and replace belt guard.

Accessories

Recommended accessories for use with your tool are available for purchase from your local dealer or authorized service center. If you need assistance in locating any accessory for your tool, contact: DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286 or call 1-800-4- DEWALT.

⚠ ***CAUTION:*** *The use of any other accessory not recommended for use with this tool could be hazardous.*

Service Information

Please have the following information available for all service calls:
Model Number _____Serial Number _____
Date and Place of Purchase _____

Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by authorized service centers or other qualified service organizations, always using identical replacement parts.

Full One Year Warranty

DEWALT heavy duty industrial tools are warranted for one year from date of purchase. We will repair, without charge, any defects due to faulty materials or workmanship. For warranty repair information, call 1-800-4-DEWALT. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call 1-800-4-DEWALT for a free replacement.

SAVE THESE INSTRUCTIONS FOR FUTURE USE

Troubleshooting Guide

This section provides a list of the more frequently encountered malfunctions, their causes and corrective actions. The operator or maintenance personnel can perform some corrective actions, and others may require the assistance of a qualified DEWALT technician or your dealer.

Problem	Code
Abnormal piston ring or cylinder wear	2,5,6,11,12,14
Unit does not come up to speed; unit is slow to come up to speed	3,4,8,15,17,20,21,25
Unit runs excessively hot	1,2,5,9,14,17
Excessive noise during operation	3,4,5,8,9,10,11,12,16,21,25,26
Excessive starting and stopping	3,8,17,20,21,25,30
High oil consumption	1,4,6,10,11,12,13,16,25,27,28
Knocking or rattling	2,5,6,9,19,11,12,16,25,26
Moisture in crankcase or "milky" appearance in petroleum lubricant or rusting in cylinders	6,7,10,11,12,16,20,21,25,29,31
Oil in discharge air (oil pumping)	2,6,8,10,11,16,27
Oil leaking from shaft seal	13
Safety relief valve "pops"	18,19
Compressor will not run or restart	32,35
Air leaks at pump	20
Air leaks at fittings	21
Air leaks from tank	22
Insufficient pressure at air tool or accessory	1,3,17,23,24
Air compressor not making enough air	1,3,4,8,10,11
Moisture in discharge air	30,31
Compressor stalls	34
Receivers are not filling with air	35

TROUBLESHOOTING CODES

Code	Possible Cause	Possible Solution
1	Clogged or dirty inlet and/or discharge line filter.	Clean or replace air inlet or discharge line filter.
2	Lubricant viscosity too low.	Drain existing lubricant and refill with DEWALT Synthetic lubricant.
3	Air leaks in air discharge piping.	Check tubing and connections.
4	Lubricant viscosity too high.	Drain existing lubricant and refill with DEWALT Synthetic lubricant.
5	Lubricant level too low.	Add lubricant to crankcase to proper level. Check for bearing damage.
6	Detergent type lubricant being used.	Drain existing lubricant and refill with DEWALT Synthetic lubricant.
7	Extremely light duty cycles.	Run unit for longer duty cycles.
8	Compressor pump check valve leaky, broken,carbonized or loose.	Inspect valves. Clean or replace as required.
9	Carbon build up on top of piston.	Clean piston. Repair or replace as required.
10	Piston rings damaged or worn (broken, rough, or scratched). Excessive end gap or side clearance. Piston rings not seated, stuck in grooves or end gaps not staggered.	Install new rings.
11	Cylinder or piston scratched, worn, or scored.	Repair or replace as required.
12	Connecting rod, piston pin, or crankpin bearings worn or scored.	Inspect all. Repair or replace as required
13	Compressor crankshaft seal worn or crankshaft scored.	Replace seal or crankshaft assembly.
14	Extremely dusty atmosphere.	Install more effective filtration or relocate the compressor.
15	Ambient temperature too low.	Relocate compressor to warmer environment. Ensure that DEWALT synthetic oil is in crankcase.
16	Worn compressor cylinder finish.	Deglaze cylinder with 180 grit flex-hone.
17	Air compressor is not large enough for air required.	Check accessory air requirement. If higher than the CFM or pressure supply of air compressor, then larger air compressor is required.

Code	Probable Cause	Probable Solution
18	Possible defective safety/relief valve.	Operate safety relief valve manually by pulling on test ring. If it still leaks, replace it.
19	Excessive air tank pressure.	Adjust the pilot valve. If the problem still exists, replace pilot valve.
20	Defective gaskets.	Replace and torque head bolts to 6 - 7 ft lbs.
21	Fittings not tight enough.	**Warning :** Drain air before tightening. tighten fittings so air can not be heard escaping. Check joint with soap solution. Do not overtighten.
22	Defective or rusted air tank	Air tank must be replaced. Do not attempt to repair air tank.
23	Pressure regulator knob not turned to high enough pressure or defective pressure regulator.	Adjust pressure regulator knob to proper setting or replace.
24	Hose or hose connections are to small or long.	Replace with larger hose or connectors.
25	Possible defective (reed) valve.	Remove pump head and inspect valve plate and (reed) valve. Clear or replace valves as required.
26	Air compressor on uneven surface.	Do not incline the air compressor more than 10˚ in any direction while running.
27	Crankcase overfilled with oil.	Drain oil, Refill to proper level with DEWALT synthetic oil.
28	Plugged oil dipstick vent.	Clean.
29	Water in oil due to condensation.	Drain oil. Refill to proper level with DEWALT synthetic oil.
30	Condensation in air tank caused by high level of atmospheric humidity.	Drain air tank after every use. Drain air tank more often in humid weather and use an air line filter.
31	Unit located in damp or humid location.	Relocate the compressor.
32	Engine oil too low. Low oil shut off is on.	Add engine oil.
33	Manual lock on pilot valve is in the loaded position.	Move manual lock into an in-line position.
34	Engine idle speed too low.	Increase idle speed.
35	Engine problem.	See “Taking care of unexpected problems” in engine owners manual.